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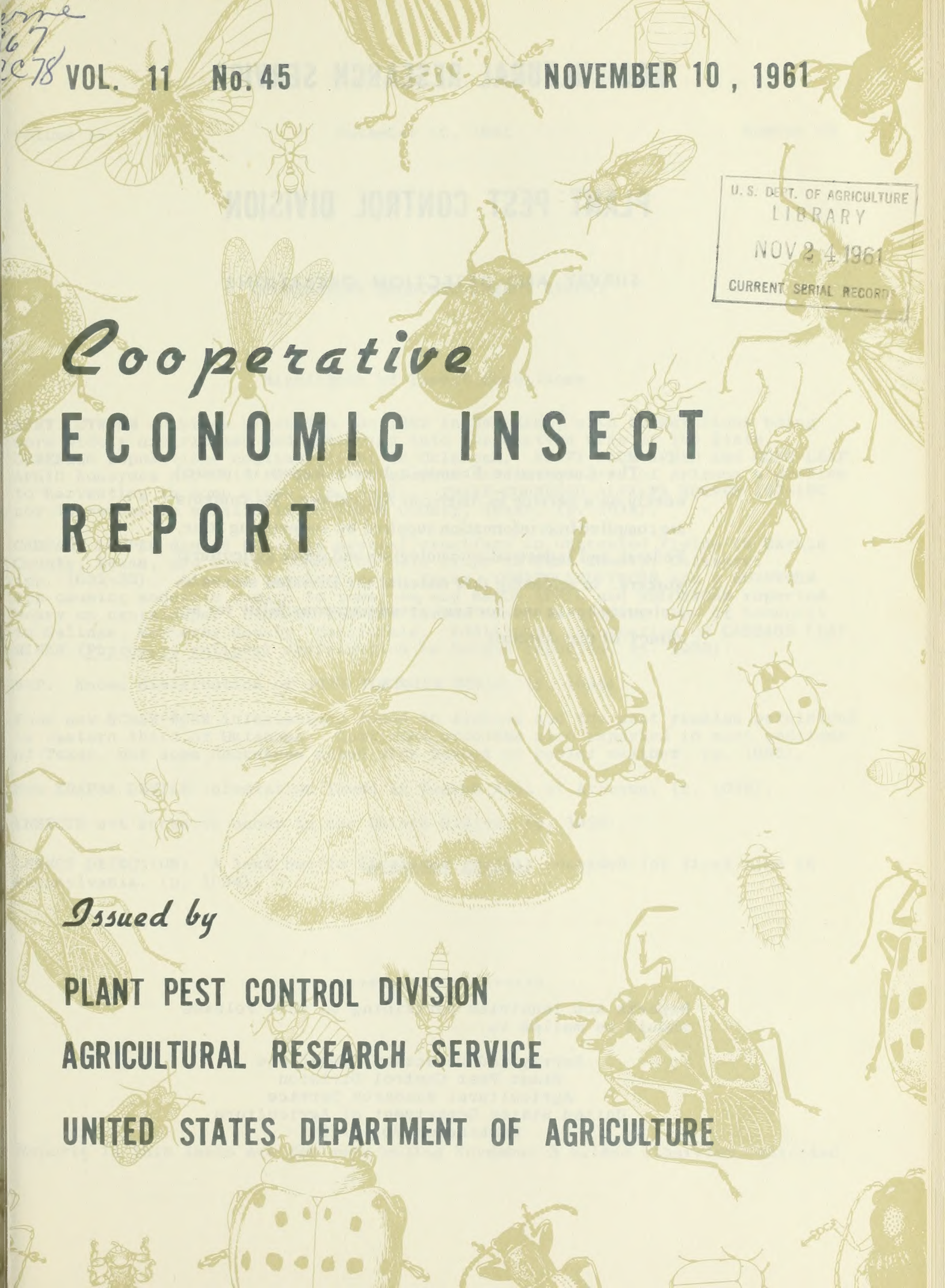

Cooperative ECONOMIC INSECT REPORT

Issued by

PLANT PEST CONTROL DIVISION
AGRICULTURAL RESEARCH SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE

AGRICULTURAL RESEARCH SERVICE

PLANT PEST CONTROL DIVISION

SURVEY AND DETECTION OPERATIONS

The Cooperative Economic Insect Report is issued weekly as a service to American Agriculture. Its contents are compiled from information supplied by cooperating State, Federal, and industrial entomologists and other agricultural workers. In releasing this material the Division serves as a clearing house and does not assume responsibility for accuracy of the material.

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Survey and Detection Operations
Plant Pest Control Division
Agricultural Research Service
United States Department of Agriculture
Washington 25, D. C.

Volume 11 November 10, 1961 Number 45

COOPERATIVE ECONOMIC INSECT REPORT

Highlights of Insect Conditions

ARMY CUTWORM outbreak predicted for 1962 in Nebraska, with infestations being more widely distributed and extending into the eastern area of the State. GREENBUG populations continue light in Oklahoma. RUSTY PLUM APHID and CORN LEAF APHID honeydew deposits in heads of sorghum in central area of Arizona a problem to harvesting in some cases. (p. 1031). THREE-CORNERED ALFALFA HOPPER 160-180 per 10 sweeps in alfalfa in Burleson County, Texas. (p. 1032).

CABBAGE LOOPER damage heavy to several crucifers in untreated fields in Zavala County, Texas, and larvae common on cole crops in Kent County, Delaware. (pp. 1032-33). Also in Zavala County, Texas, TOMATO FRUITWORM and a HORNWORM are causing moderate damage to tomatoes, and MELON APHID and MELONWORM reported heavy on cantaloups. CABBAGE WEBWORM larvae heavy in growing tips of broccoli in Salinas, Monterey County, California. Additional information on CABBAGE LEAF MINER (_Phytomyza rufipes_) distribution in Oregon reported. (p. 1033).

MAP: Known distribution of PINE TORTOISE SCALE. (p. 1035).

Four new SCREW-WORM infestations found in Alabama and the pest remains persistent in eastern third of Oklahoma. Continued problems also reported in most sections of Texas, but some decreases noted with advent of cooler weather. (p. 1036).

New KHAPRA BEETLE infestation found in Tucson area of Arizona. (p. 1036).

INSECTS not known to occur in the United States. (p. 1039).

INSECT DETECTION: A leaf beetle (_Acalymma gouldi_) recorded for first time in Pennsylvania. (p. 1034).

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Reports in this issue are for week ending November 3 unless otherwise indicated

WEATHER BUREAU 30-DAY OUTLOOK

NOVEMBER 1961

The Weather Bureau's 30-day outlook for November calls for early wintry conditions over the western half of the United States with temperatures averaging well below normal. On the other hand, warmer than normal conditions are expected to prevail over much of the East except for near normal in the Northeast. This temperature pattern breeds frequent storms which are expected to produce precipitation in excess of normal over most of the Nation, except the southeast and Pacific Northwest where subnormal amounts are indicated. Over the West, the Northern Plains and the Western Great Lakes, a considerable portion of the precipitation is expected to occur as snow.

Weather forecast given here is based on the official 30-day "Resume and Outlook", published twice a month by the Weather Bureau. You can subscribe through Superintendent of Documents, Washington 25, D. C. Price $4.80 a year, $2.40 a half year.

WEATHER OF THE WEEK ENDING NOVEMBER 6

The week was unusually cold in the West and extremely warm in the East. Average temperatures for the week ranged from 18° above normal at Charlotte, North Carolina, to 15° below at Sheridan, Wyoming. In most of the Far West, temperatures were below normal all week. Weekly minima were below the zero level at many higher stations in the Rockies, and light frost was observed at many low-altitude stations in the northern two-thirds of California. Weekly averages generally ranged from 9° to 12° below normal in the Rockies and 6° to 9° elsewhere from the western portions of the Great Plains to the Cascade and Sierra Nevada Mountains. In the midcontinent area, the first part of the week was unseasonably warm. On November 1, maximum temperatures ranged from 90° at Laredo, Texas, to 67° at Bismarck, North Dakota. Cold air from the west moved into the Great Plains on November 2 and 3 and reached the Appalachians by the end of the period. This first wintry blast of the season produced a 24-hour temperature drop of 50° in the northern Great Plains on the 1st and 2d of November. The first general freeze of the season in the Panhandle and High Plains of Texas on the 3d followed in the wake of the season's first "norther" in that State. The entire week was warm east of the Appalachians, and the first 4 days of the week between the Appalachians and the Mississippi River. Maxima in the 80's in the Ohio Valley and Middle Atlantic States on the 2d and 3d set new records for the dates and for so late in the season at a number of stations.

Precipitation generally was moderate to heavy in the midcontinent region and light in the Far West and along the east coast. Generous rainfall was very beneficial in Texas and the lower Ohio Valley. In an area including the Carolinas, Georgia, Florida, and southeastern Alabama, rainfall was much below normal, and soil moisture continued short. Much of the precipitation in the Far West fell in the form of snow. Unusually heavy amounts fell in the central Rockies where a 44-inch fall during the last 3 days of October set an early season record at Salida, Colorado. Considerable snow also fell in the Cascade Mountains, and depths above 4,000 feet in the northern Cascades now range from 1 to 2 feet. In Arizona's White Mountains, more than a foot of snow accumulated during the week. (Summary supplied by U. S. Weather Bureau).

CEREAL AND FORAGE INSECTS

SOUTHWESTERN CORN BORER (*Zeadiatraea grandiosella*) - KANSAS - Approximately 1,900 corn plants examined in variety test plot in Stafford County found to be 100 percent infested; many plants girdled. Most larvae already white. Of approximately 2,000 plants examined in Reno County, only one uninfested plant found. Both plots had heaviest infestations noted since 1940's. (Painter).

ARMY CUTWORM (*Chorizagrotis auxiliaris*) - NEBRASKA - Populations in 1962 should vary from the same as occurred during 1961 to twice as heavy, causing another outbreak. Infestations should be more widely distributed in 1962, extending into the eastern part of the State. (Pruess, Oct. 30).

GREENBUG (*Toxoptera graminum*) - OKLAHOMA - Light populations common in Stillwater area, Payne County, south to Chandler, Lincoln County; light populations also noted in Guthrie area, Logan County. Populations mostly colonized on individual leaves. Some winged adults noted on plants. Checks in El Reno area, Canadian County, and Kingfisher area, Kingfisher County, negative. Population light on volunteer plants in Hobart area, Kiowa County, and at Custer City, Custer County, and in Jackson County. (Okla. Coop. Sur.).

ENGLISH GRAIN APHID (*Macrosiphum granarium*) - OKLAHOMA - Small numbers (1-12 per plant) found on volunteer wheat checked in southwest. (Okla. Coop. Sur.).

RUSTY PLUM APHID (*Hysteroneura setariae*) and CORN LEAF APHID (*Rhopalosiphum maidis*) - ARIZONA - Heavy infestations present in central area sorghum and honeydew deposits in heads a problem to harvesting in some cases. (Ariz. Coop. Sur.).

HESSIAN FLY (*Phytophaga destructor*) - KANSAS - Large field of volunteer wheat examined in Rice County found heavily infested with larvae; flaxseeds approximately 10 percent. Estimated 70-90 percent of plants infested. No evidence of this pest found in field of volunteer wheat examined in Saline County. One larva found in field of wheat in Stafford County, after considerable examination. (Painter).

GRASSHOPPERS - COLORADO - Grasshoppers moving from soil bank lands into fall planted wheat have caused considerable damage in some eastern counties. (Colo. Ins. Sur., Oct. 31).

SPOTTED ALFALFA APHID (*Therioaphis maculata*) - ARIZONA - Infestations declining generally in alfalfa in central and southwest areas. Infestations still heavy in some fields, however; fields being damaged considerably. Diseased aphids evident in all areas. (Ariz. Coop. Sur.). NEW MEXICO - Scattered, light infestations noted in alfalfa in Dona Ana and Sierra Counties. (N. M. Coop. Rpt.). TEXAS - Light populations (50 per 10 sweeps) appearing on alfalfa in Burleson County. (Newton). OKLAHOMA - Light populations (40 per sweep) noted on alfalfa checked in southwest. (Okla. Coop. Sur.). ARKANSAS - None found in Conway County alfalfa. (Ark. Ins. Sur.). NEBRASKA - Ranged 1,112-4,070 per 10 sweeps in Dundy, Furnas and Red Willow Counties, week of October 23. (Stevens). Currently, 0.7-10.8 per 10 sweeps in Greeley and Howard Counties (Calkins, Kishaba) and 1-11 per 10 sweeps in Boyd and Holt Counties (Bergman).

PEA APHID (*Macrosiphum pisi*) - NEW MEXICO - Generally light in alfalfa in Dona Ana and Sierra Counties. (N. M. Coop. Rpt.). OKLAHOMA - Light (8 per sweep) on alfalfa checked in southwest. Local, light infestation noted on wheat in Jackson County. (Okla. Coop. Sur.). ARKANSAS - Counts low in alfalfa in Conway County; 20-25 collected with 25 sweeps of 5-inch net. (Ark. Ins. Sur.). DELAWARE - Averaged 15-25 per sweep in alfalfa in Kent and Sussex Counties. (Burbutis, Mason).

CORN EARWORM (*Heliothis zea*) - TEXAS - Larvae averaged 5 per 10 sweeps in alfalfa in Burleson County. (Newton). SOUTH DAKOTA - Samples examined from eastern part of State indicate that infestations during 1961 were the lighest in many years.

Of seven 125-ear samples (175 ears) examined in Lake and Moody Counties, only 2 ears showed evidence of damage. (Spawn). DELAWARE - Mature larvae present in one field of alfalfa in Kent County. (Burbutis, Mason).

GREEN STINK BUG (Acrosternum hilare) - TEXAS - Counts on various crops in Burleson County were as follows: Soybeans - 10 per 10 sweeps; alfalfa - 10 per 10 sweeps; castorbeans - 20 per 10 leaves. (Newton).

PLANT BUGS - DELAWARE - Adults of Lygus lineolaris ranged up to 150 per 100 sweeps in alfalfa in Kent and Sussex Counties; nymphs very scarce. Adelphocoris rapidus adults present in few scattered alfalfa fields in these same counties. (Burbutis, Mason). ARKANSAS - L. lineolaris adults averaged 3 per 25 sweeps of 5-inch net in Conway County. (Ark. Ins. Sur.).

THREE-CORNERED ALFALFA HOPPER (Spissistilus festinus) - TEXAS - Ranged 160-180 per 10 sweeps in alfalfa and averaged 3.5 per 10 sweeps in soybeans in Burleson County (Newton). ARKANSAS - Averaged 3 per 25 sweeps of 5-inch net in Conway County. (Ark. Ins. Sur.).

MEXICAN BEAN BEETLE (Epilachna varivestis) - MARYLAND - Large numbers hibernating near shoreline vegetation at Point Lookout, St. Marys County. (U. Md., Ent. Dept.)

CLOVER ROOT CURCULIO (Sitona hispidula) - NEBRASKA - Ranged 1-12 per 10 sweeps (averaged 4) on alfalfa in Boyd County. (Bergman).

SPOTTED CUCUMBER BEETLE (Diabrotica undecimpunctata howardi) - OKLAHOMA - Light (0.5 per sweep) on alfalfa checked in Frederick area, Tillman County. (Okla. Coop. Sur.). DELAWARE - Adults ranged from present to 160 per 100 sweeps in alfalfa in Kent and Sussex Counties. (Burbutis, Mason).

A WEEVIL (Brachyrhinus cribricollis) - CALIFORNIA - Adults medium and feeding on dichondra lawns in Chula Vista, San Diego County. (Cal. Coop. Rpt.).

FRUIT INSECTS

EUROPEAN RED MITE (Panonychus ulmi) - OREGON - Large numbers of eggs and adults present on apple trees near McMinnville, Yamhill County, November 2. (Stephenson).

A BARK BEETLE (Scolytus sp.) - OREGON - Present in diseased prune trees in Washington County. (Loring).

NAVEL ORANGEWORM (Paramyelois transitella) - CALIFORNIA - Medium infestation in almond fruit under almond trees in Kerman, Fresno County. (Cal. Coop. Rpt.).

PECAN WEEVIL (Curculio caryae) - ALABAMA - Larvae scarce in cracked pecans in Lee County. (Guyton).

TRUCK CROP INSECTS

GREENHOUSE WHITEFLY (Trialeurodes vaporariorum) - UTAH - Damaged pole beans, lettuce, peppers, squash, cucumbers and infested garden plants at Logan, Cache County, during early September. Presently in experimental greenhouses at Logan. Det. by L. M. Russell. (Knowlton).

CABBAGE LOOPER (Trichoplusia ni) - TEXAS - Moderate infestations widespread on Brussels sprouts, cabbage, broccoli, kohlrabi and spinach; damage moderate to heavy in untreated fields in Zavala County. Controls by growers have been very satisfactory, however. (Harding). DELAWARE - Larvae common on cole crops in Kent County. (Burbutis, Mason).

IMPORTED CABBAGEWORM (Pieris rapae) - OKLAHOMA - Feeding on vegetables in Choctaw County. (Okla. Coop. Sur.) DELAWARE - Larvae common on cabbage and cauliflower in central Kent County, causing light injury. (Burbutis, Mason).

POTATO TUBERWORM (Gnorimoschema operculella) - CALIFORNIA - Larvae light on potatoes in Gonzales area, Monterey County. (Cal. Coop. Rpt.).

TOMATO FRUITWORM (Heliothis zea) - TEXAS - Moderate, local populations causing noticeable fruit damage to tomatoes in Zavala County. (Harding).

A TOMATO HORNWORM (Protoparce sp.) - TEXAS - Moderate, local populations in Zavala County causing noticeable foliar damage to tomatoes. (Harding).

TOMATO PINWORM (Keiferia lycopersicella) - CALIFORNIA - Medium populations present on tomatoes in Hemet, Riverside County. (Cal. Coop. Rpt.).

MELON APHID (Aphis gossypii) - TEXAS - Heavy, widespread populations of over 500 per leaf attacking cantaloups and watermelons in Zavala County. (Harding).

MELONWORM (Diaphania hyalinata) - TEXAS - In Zavala County, numerous canteloup fruits and at least one-third of leaves have been destroyed by heavy, local populations. (Harding).

CABBAGE WEBWORM (Hellula rogatalis) - CALIFORNIA - Heavy larval populations in growing tips of broccoli in Salinas, Monterey County. (Cal. Coop. Rpt., Oct. 27).

CABBAGE LEAF MINER (Phytomyza rufipes) - OREGON - In reference to the note in CEIR 9(47):1007, 1959, additional information and a correction have been given by Dr. Kenneth E. Frick. Five specimens were collected April 25, 1938, at Vernonia, in Columbia County, which is not in central Oregon. Additional specimens were found on May 3, 1939, 3 miles east of Ochoco Ranger Station, Crook County; this county is in the central area of the State. (PPC).

GRASSHOPPERS - DELAWARE - Several species, but mainly Melanoplus femurrubrum, feeding heavily on Chinese cabbage in Kent County and causing noticeable injury. (Burbutis, Mason).

APHIDS - MARYLAND - Undetermined species infesting spinach at Glenarm, Baltimore County; controls required. (U. Md., Ent. Dept.).

ARMYWORMS - ARIZONA - Light to medium infestations of Prodenia ornithogalli and Spodoptera exigua present in some central area sugar beets; controls required. P. ornithogalli is the more abundant species. (Ariz. Coop. Sur.).

GREEN PEACH APHID (Myzus persicae) - ARIZONA - Light but general infestations present in central area sugar beets. (Ariz. Coop. Sur.).

COTTON INSECTS

PINK BOLLWORM (Pectinophora gossypiella) - ARIZONA - One male moth has been collected in light trap in southeast Pima County; collection made in Thurberia and was not near cultivated cotton. No new infestations have been found in central section eradication area since earlier collections near Stanfield in Pinal County. (Ariz. Coop. Sur.). OKLAHOMA - Gin trash inspections continue negative in Greer, Custer, Harmon, Roger Mills and Beckham Counties. Counts less than one larva per bushel of gin trash in other counties checked. (Okla. Coop. Rpt.).

FOREST, ORNAMENTAL AND SHADE TREE INSECTS

BARK BEETLES (*Dendroctonus* spp.) - CALIFORNIA - *D. monticolae* and *D. brevicomis* severely damaging 100-acre stand of ponderosa and sugar pines in groups of 5-8 trees. Over 60 young saw timber trees already dead in Portuguese Ridge area of Sierra National Forest. (J. Zackry).

Red Fir Cone Insects in California: Complex of a CONE MOTH (*Laspeyresia bracteatana*), a FIR SEED MAGGOT (*Earomyia* sp.), a SEED CHALCID (*Megastigma* sp.) and a FIR SEED GALL MIDGE (*Dasyneura abiesemia*) infesting red fir cones in Foresthill area of Placer County. This complex is extremely heavy this season. (E. E. Sechrist).

A COSMOPTERYGID (*Periploca* n. sp.) - CALIFORNIA - Light infestation present on junipers in Huntington Estate in San Marino, Los Angeles County. (Cal. Coop.Rpt.).

VARIABLE OAK LEAF CATERPILLAR (*Heterocampa manteo*) - OKLAHOMA - Countywide damage noted in McIntosh County; some trees 75 percent defoliated. (Okla. Coop. Sur.).

APHIDS - ARKANSAS - Infestations of undetermined species heavy on maple and weeping willow in Washington County. (Ark. Ins. Sur.). NEBRASKA - *Lachnus salignus* extremely abundant on willows in North Platte, Lincoln County; honeydew thick on ground and sidewalks under trees. (Pruess).

COCCIDS - CALIFORNIA - *Lepidosaphes ulmi* and *Aspidiotus aesculi* heavy on quaking aspen in Tulelake area, Modoc County. (Cal. Coop. Rpt.).

TWIG GIRDLER (*Oncideres cingulata*) - OKLAHOMA - Continued damaging to pecan and elm trees in Hughes, Cherokee, McIntosh, Muskogee, Mayes, Cleveland and Kingfisher Counties. (Okla. Coop. Sur.).

A BOSTRICHID (*Amphicerus cornutus*) - CALIFORNIA - Larvae heavy in bark of desert-ironwood in Bard, Imperial County. (Cal. Coop. Rpt.).

A LEAF BEETLE (*Acalymma gouldi*) - PENNSYLVANIA - Collected at Harrisburg and Dauphin, Dauphin County, on June 27 and July 5, respectively. This is a new State record. (Sleesman, Balsbaugh, Oct. 27).

A LEAF MINER (*Phyllocnistis populiella*) - UTAH - Probably this species, has been damaging aspen at higher elevations in State during recent years. Although there has been no positive determination made of material in this State, specimens appear to be the same as species occurring in adjacent areas. (Knowlton).

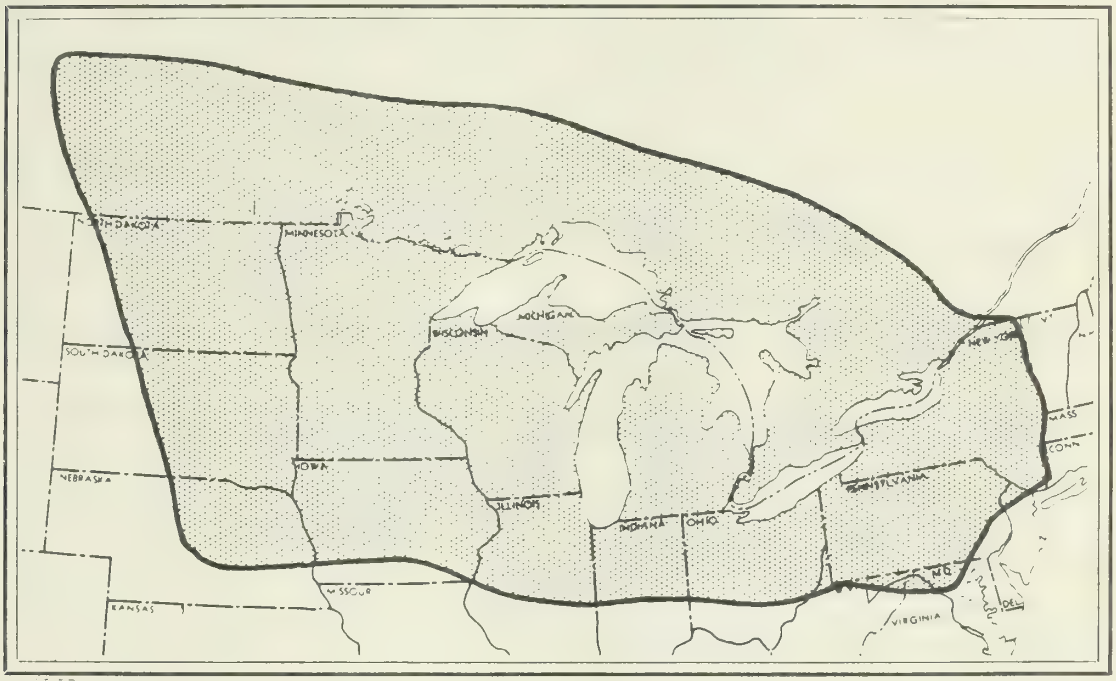
WALKINGSTICKS - ARKANSAS - Heavy infestations of undetermined species reported on oaks in Franklin County. (Ark. Ins. Sur.).

SPIDER MITES - OREGON - *Eotetranychus lewisi* heavily infested several beds of poinsettia cuttings in Portland greenhouses; caused yellowing of plants and speckling of foliage. This problem has become an annual occurrence on poinsettias imported from out of State in preparation for the holiday season. *Panonychus ulmi* severely damaged home planting of *Skimmia* sp. (an evergreen shrub) in Portland area. (Nicolaison).

CHRYSANTHEMUM APHID (*Macrosiphum sanborni*) - CALIFORNIA - Medium population present on chrysanthemums in Oroville, Butte County. (Cal. Coop. Rpt.)

A SPRINGTAIL (*Onychiurus fimetarius*) - CALIFORNIA - Populations heavy on soil about azaleas in San Diego, San Diego County. (Cal. Coop. Rpt.).

KNOWN DISTRIBUTION OF PINE TORTOISE SCALE (*Toumeyella numismaticum*)



From Forest Pest Leaflet 57
Forest Service, USDA
August 1961

INSECTS AFFECTING MAN AND ANIMALS

SCREW-WORM (*Callitroga hominivorax*) - ALABAMA - Four new infestations found (one each) in Winston, St. Clair, Etowah and Jefferson Counties. (Buttram). OKLAHOMA - Persistent in eastern third of State; 75 percent of new-born calves in some herds infested in McCurtain County. Present in Cotton and Greer Counties. (Okla. Coop. Sur.). TEXAS - Reports indicate continued problems in most sections, but some decrease noted with advent of cooler weather. (Texas Coop. Rpt.).

STABLE FLY (*Stomoxys calcitrans*) - OKLAHOMA - Populations decreased in Stillwater area. (Okla. Coop. Sur.).

HORN FLY (*Haematobia irritans*) - OKLAHOMA - Populations decreased appreciably in Stillwater area; 400-500 flies per head on cattle in McIntosh County. (Okla. Coop. Sur.).

BLACK FLIES (*Simulium* spp.) - OKLAHOMA - Ranged 25-30 per ear on horses in Stillwater area. (Okla. Coop. Sur.).

HOUSE FLY (*Musca domestica*) - OKLAHOMA - Populations decreased in Stillwater area; remain present in sheltered areas. (Okla. Coop. Sur.).

CATTLE LICE - NEW MEXICO - Reports from southern counties indicate unusually light populations on range cattle. (N. M. Coop. Rpt.). UTAH - Causing cattle to rub at Plain City, Weber County. Conspicuous on some cattle herds in Paria River area of Kane County. (Knowlton).

BLACK-LEGGED TICK (*Ixodes scapularis*) - OKLAHOMA - Large populations caused concern around Gum Springs; 50 ticks taken from one dog. (Okla. Coop. Sur.).

A SCORPION (*Vaejovis* sp.) - WYOMING - Heavy infestation reported on rangeland near Saratoga, Carbon County; 2 people have been bitten. (Fullerton).

STORED-PRODUCT INSECTS

KHAPRA BEETLE (*Trogoderma granarium*) - ARIZONA - New infestation found in small storage shed in Tucson area, Pima County. (Ariz. Coop. Sur.).

LESSER GRAIN BORER (*Rhizopertha dominica*) - OREGON - Infestation found in grain establishment in Nyssa, Malheur County, week of October 26. (Goeden).

INDIAN-MEAL MOTH (*Plodia interpunctella*) - UTAH - Infesting very large new wheat storage building at Manti, Sanpete County. (Knowlton).

ANGOUMOIS GRAIN MOTH (*Sitotroga cerealella*) - KANSAS - Adults active and heavy in crib of 1960 ear corn examined in Clay County. (Gates, Peters).

Stored-product Insects in Alabama: Heavy infestations of HIDE BEETLE (*Dermestes maculatus*) observed in stored fish meal in Mobile State Docks; all stages present. (Siebels). Adults of MEAL MOTH (*Pyralis farinalis*) infested feed barns in Lee County. Infestations of DARK MEALWORM (*Tenebrio obscurus*) and CIGARETTE BEETLE (*Lasioderma serricorne*) were numerous in the county, with infestations of YELLOW MEALWORM (*Tenebrio molitor*), ANGOUMOIS GRAIN MOTH (*Sitotroga cerealella*) and CADELLE (*Tenebroides mauritanicus*) also present. (Guyton).

Stored-grain Insects in Wyoming: Adults of SAW-TOOTHED GRAIN BEETLE (*Oryzaephilus surinamensis*) and RED FLOUR BEETLE (*Tribolium castaneum*) and larvae of CADELLE (*Tenebroides mauritanicus*) infesting stored grain and stored-grain products in Albany County. (Fullerton).

BENEFICIAL INSECTS

A PARASITIC TACHINID (Lydella grisescens) - NEBRASKA - Empty pupal cases found in Lancaster and Jefferson Counties. (Bergman).

NABIDS (Nabis spp.) - TEXAS - Averaged 35 per 10 sweeps on alfalfa in Burleson County. (Newton).

MISCELLANEOUS INSECTS

A NITIDULID (Conotelus mexicanus) - NEW MEXICO - Extremely numerous on flowers in gardens and cotton blooms in southern counties. Also minor problem in lettuce and cabbage. (N. M. Coop. Rpt.).

A POWDER-POST BEETLE (Lyctus africanus) - CALIFORNIA - Heavy populations present in reed curtains in a home in Oakland, Alameda County. (Cal. Coop. Rpt.).

OLD-HOUSE BORER (Hylotrupes bajulus) - MARYLAND - Larvae infesting pine subflooring in a home at Burtonsville, Montgomery County. (U. Md., Ent. Dept.).

RING-LEGGED EARWIG (Euborellia annulipes) - OKLAHOMA - Caused concern around homes in Ardmore, Carter County. (Okla. Coop. Sur.).

SILVERFISH (Lapisma saccharina) - UTAH - Infestations in home and merchandising establishment in Logan, Cache County. (Knowlton).

CAMEL CRICKETS - UTAH - Present in basements at Logan, Cache County. (Knowlton).

MILLIPEDS - OKLAHOMA - A nuisance around homes in Stillwater area. (Okla. Coop. Sur.).

CLOVER MITES (Bryobia praetiosa complex) - SOUTH DAKOTA - Is a serious pest in homes in Brown County. (Hanten).

LIGHT TRAP COLLECTIONS

	Pseud. unip.	Agrot. ips.	Perid. saucia	Prod. ornith.	Laphyg. frug.	Trich. ni	Helio. zea
ARKANSAS							
Hope 10/26-11/1	28	33					39
Morrilton 10/26-11/1		8					46
Fayetteville 10/26-11/1							4
INDIANA (Counties)							
Tippecanoe 10/26-11/1	1						
Vanderburgh 10/16-23	3	3			5		8
MISSISSIPPI							
*Stoneville 10/27-11/2	841	313	15	74	104	388	127
NEBRASKA							
North Platte 10/26-11/1	62	288	24				24
SOUTH CAROLINA							
Charleston 10/30-11/5	36	40		18	4	10	41
TENNESSEE (Counties)							
Maury 10/26-11/1	4	8					12
Robertson 10/26-11/1	3	19			2		15
Cumberland 10/26-11/1		1					
Greene 10/26-11/1		24			12		4
Blount 10/26-11/1		20					8
Johnson 10/26-11/1	3	6	1	1	3		25
TEXAS							
*Brownsville 10/21-27	10	5	13	12	40	19	16
Waco 10/28-11/3	23		85	25		40	11
WISCONSIN							
Middleton 10/27-11/1	4	5	2				2
Madison 10/27-11/1	12	8	2				6

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*Two traps - Stoneville; 4 traps - Brownsville

Additional Light Trap Collection: VELVETBEAN CATERPILLAR (*Anticarsia gemmatalis*) - SOUTH CAROLINA - Charleston (10/30-11/5) - 283.

INSECTS NOT KNOWN TO OCCUR IN THE UNITED STATES

WATTLE BAGWORM (*Kotochalia junodi* (Heylaerts))

Economic Importance: This bagworm is the most serious pest of wattle (*Acacia* spp.) in South Africa. Extracts from the bark of *Acacia decurrens* and *A. d. mollis* are used in tanning. Whole wattle plantations may be completely defoliated. The true economic loss resulting from damage caused by the bagworm is not known with certainty, but there is a serious check to growth which, if repeated, will permanently damage the tree. There is also a substantial loss of both bark and wood increment. A secondary effect is that the increased penetration of light into the plantation, consequent upon the loss of foliage, allows strong growth of weeds. Where a mature plantation is heavily attacked, stripping may become difficult or impossible as the season progresses. The wattle industry contributes considerable income annually to South Africa; the annual value of wattle exports reached nearly 21.5 million dollars by 1953. The annual loss has been estimated to be approximately 3 percent, which would mean that if the export trade was taken as a basis the loss to the wattle-growing community of South Africa would have been about $645,000 in 1953. Losses to individual plantation owners may sometimes be quite severe during outbreak years; a bark loss of 30 percent has been recorded.

Peak infestations seem to occur every 5-7 years. The endemic stage is followed by 2 years of a preparatory stage when the bagworms become more numerous, and then by a prodromal or premonitory stage of about 2 years when bagworm populations increase rapidly and damage becomes evident. The eruptive stage, which follows, may last 1-3 years. Trees become completely defoliated, and bagworms may die from lack of food and are also prone to disease. An abatement of the infestation follows and populations return to normal.

Assessing the degrees of infestation is best done during February, when the bagworms are full grown and can be easily seen and when damage to foliage has reached its height. The standard system of classification of the degrees of infestation follows: (LIGHT) 1. Very few bagworms on occasional trees throughout plantations. 2. Few bagworms on most trees; no observable damage. 3. Bagworms on nearly all trees; slight damage to crowns of some trees. (MODERATE) 4. Bagworms on all trees; crowns of all trees damaged, but none completely defoliated. 5. Bagworms on all trees; some trees completely defoliated. (HEAVY) 6. Almost complete defoliation throughout plantation; occasional trees showing green foliage. 7. Virtually complete defoliation. The number of empty male bags in one particular season gives some indication of the severity of the infestation which may be expected that season. The proportion of females to males which reach maturity and are able to reproduce is approximately one to two. Therefore, by making an estimate of the number of male bags and dividing by two, a rough estimate of the number of females, expected number of larvae and degree of infestation can be made.

Distribution: South Africa.

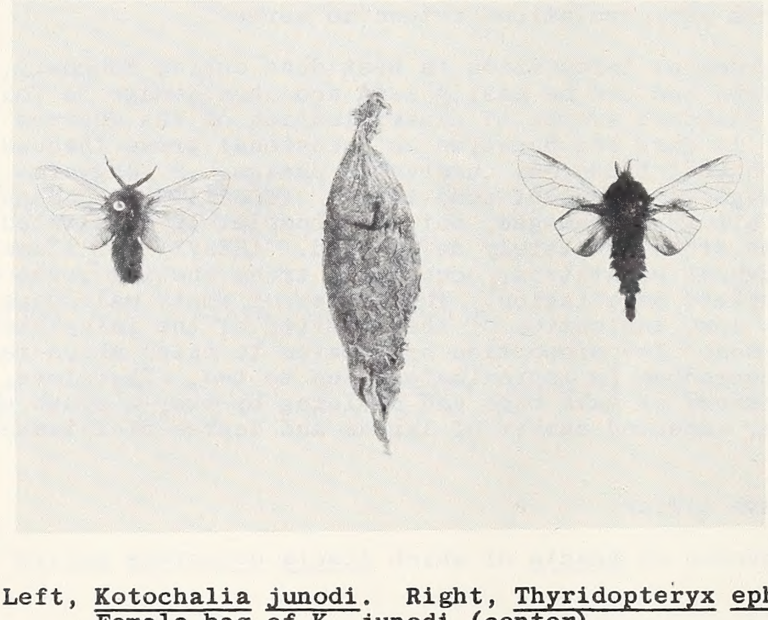
Hosts: Several species of *Acacia* of which *Acacia decurrens mollis* is the most important.

Life History and Habits: The species takes 12 months to complete its development. Males emerge and copulation begins at the end of July and continues through August. Adult females, which never leave their bags, reach sexual maturity around the end of July and during August, and after mating lay up to 2,000 eggs or more each. The exact number of eggs depends on the vigor of the particular female. Females lay a greater number of eggs when food is abundant during their larval development.

(Psychidae, Lepidoptera)

Hatching begins 8-10 weeks later and young larvae leave the maternal bag and start spreading in search of food. The main brood of larvae emerges during September and the adults begin dying off. Larvae encase themselves soon after hatching and feed for the better part of 6 months. At first they congregate mainly on the tops of trees and at the ends of branches with young foliage. Larval feeding damage begins to appear in October and reaches a peak in January when the larvae near maturity. Feeding generally ceases in March, at which time larvae tend to congregate. It is not unusual to find several bags attached to the same twig or grouped in bunches. Pupation begins for the males in April and in May for the females.

Description: Superficially, Kotochalia junodi more closely resembles the North American bagworm (Thyridopteryx ephemeraeformis) than does any other foreign species. (See photograph below). The males of the two species may be separated in a number of ways, the most obvious being the difference in color. K. junodi is dark brown, while T. ephemeraeformis is black. Briefly, K. junodi is described as follows: ADULT MALE - Wing expanse about 3 mm. and length of body 1.2 mm. or less. Body clothed with dense, velvet-like, brown pile. Wings practically without scales; few present along basal margin. BAGS - Male bag is smaller and more slender than that of female, and after the emergence of the adult male it can be clearly distinguished by the empty pupal case protruding from the end. LARVAE - Bodies black, or almost so, and soft and fleshy except for thoracic segments which, like the head, are sclerotized and have tortoise-shell markings. PUPAE - Males and females strikingly different. Male pupa rather typical, while female shows little resemblance to a lepidopterous pupa. (Prepared in Survey and Detection Operations in cooperation with other ARS agencies and the U. S. National Museum). CEIR 11(45):11-10-61.



Male Adults - Left, Kotochalia junodi. Right, Thyridopteryx ephemeraeformis. Female bag of K. junodi (center).

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